BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of Work: Modifed Estimate for Improvements to Roads and Drains in Singapura Paradise low level areas in Ward No. 11 Kuvempunagara.

								Estimate Cost Rs.	968639.00
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 149/ Item No. 19.1/ PWD SR 2011-12**	Cum							
	Removal of Silt in Drains		2	105.00	0.45	0.30	28.35		
			2	110.00	0.45	0.30	29.70		
			2	98.00	0.45	0.30	26.46		
			2	95.00	0.45	0.30	25.65		
			2	60.00	0.45	0.30	16.20		
	For Road Work		1	105.00	5.20	0.15	81.90		
			1	110.00	5.20	0.15	85.80		
			1	98.00	5.20	0.15	76.44		
			1	95.00	5.20	0.15	74.10		
			1	60.00	5.20	0.15	46.80		
	Total Executed Qty						**491.40**	TP 61.00	**29975.00**
2	KSRRB 300-2 : Earth work excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3 **Page No. 149 / Item No. 19.2/ PWD SR 2011-12**	Cum							
	For Culverts		4	5.50	2.00	1.00	44.00		
	For BS Slab Drains		2	70.00	0.60	0.60	50.40		
			2	42.00	0.60	0.60	30.24		
	Total Executed Qty						**124.64**	TP 84.00	**10470.00**
3	Removing B.S. Slab Drain and stacking (P.28/I.5.32 PWD SR - 2011-12)	Sqm							
			2	94.00		1.35	253.80		
			2	73.00		1.35	197.10		
			2	54.00		1.35	145.80		
	Total Executed Qty						**596.70**	TP 46.00	**27448.00**
4	Refixing stone slabs of drains and pointing in CM (1:3) (P.28/I.5.33 PWD SR - 2011-12)	Sqm							
	Total Executed Qty			Vide Item No.3			**596.70**	TP 58.00	**34609.00**
5	Providing **7.5 cms thick** granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete (P.28/I.5.31.1 PWD SR - 2011-12)	Sqm							
			2	70.00		1.65	231.00		
			2	42.00		1.65	138.60		
	Total Executed Qty						**369.60**	TP 322.00	**119011.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
6	KSRRB M300-53. Construction of embankment with approved materials Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications. which includes cost of gravel / Murrum, watering charges & compaction by vibratory roller) **PWD SR 2011-2012 Bangalore circle Pg No. 156, I No. 19.60**	Cum							
				Not executed					
7	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs** using 40mm and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.12/I.4.3 PWD SR - 2011-12)	Cum							
	For Culvert		4	5.50	1.80	0.15	5.94	TP	
	Total Executed Qty						**5.94**	3821.00	**22697.00**
									22696.74
8	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation **cement mortar 1:6**, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specification. KBS 5.1.13 (P.25/I.5.6 PWD SR -	Cum							
	Total Executed Qty		2x4	5.50	0.60	0.60	15.84	TP	
							15.84	2743.00	**43449.00**
									43449.12
9	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix M15 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2011-12**	Cum							
	Total Executed Qty		2x4	5.50	0.60	0.10	**2.64**	TP 4328.00	**11426.00**
									11425.92
10	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with **cement mortar 1:3,** 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.119 / I.15.1 PWD SR - 2011-12)	Sqm							
	Total Executed Qty		2x4	5.50		0.65	28.60	TP	
							28.60	74.00	**2116.00**
									2116.40

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
11	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.17 / I.4.31 PWD SR - 2011-12)	Sqm							
			4x9	4.85	0.23		40.16		
			4x9	0.60	1.80		38.88	TP	
	Total Executed Qty						**79.04**	215.00	**16993.00**
									16993.60
12	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 **(P.13/I.4.11 PWD SR - 2011-12)**	Cum							
	For Culverts		4x9	0.60	1.80	0.23	8.94	TP	
	Total Executed Qty						**8.94**	5138.00	**45946.00**
									45933.72
13	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **Page No. 19/ Item No. 4.46/ PWD SR 2011-12**	Qtl							
	80 Kgs / Cum		0.80	8.94			**7.15**	TP 7127.00	**50986.00**
									50958.05
14	KSRRB M400-14.2: Providing, laying, spreading and compacting stone aggregates of specific size to water bound macadam specifications. Including spreading in uniform thickness, hand packing, rolling with 3-whelled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse aggregates, watering and compacting to the required density complete as per specifications. B by mechanical meansCrushable type **such as moorum or gravel for grading II , No. 166/ Item No. 20.15.2/ PWD SR 2011-12**	Cum							
			Not Executed						

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	KSRRB M400-14.2: Providing, laying, spreading and compacting stone aggregates of specific size to water bound macadam specifications. Including spreading in uniform thickness, hand packing, rolling with 3-whelled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse aggregates, watering and compacting to the required density complete as per specifications. B by mechanical means Crushable type **such as moorum or gravel for grading III, No. 166/ Item No. 20.15.4/ PWD SR 2011-12**	Cum							
				Not Executed					
16	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)	Cum							
	Total Executed Qty			Vide Item No. 1+2			**585.24**	71.90	**42079.00**
	EIRL								
1	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **(P.167/I.20.18) PWD SR - 2012-13.**	Cum							
	For Camber Correction		2	100.00	1.20	0.15	36.00		
			2	108.00	1.20	0.15	38.88		
			1	100.00	5.50	0.10	55.00		
			1	108.00	5.50	0.10	59.40		
							114.40		
	Consider 15% for Pot hole filling						**17.16**		
							206.44	1027.80	**212179.00**
	PWD SR 2012-13 Basic Rate	981.00							
	Area Weightage @ 8%	78.48							
	Total	**1059.48**							
	Tender Premium -2.99%	**31.68**							
	Grand Total	**1027.80**							
2	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **(P.172 / I.21.1) PWDSR 2012-13**	Sqm							
			1	100.00	5.50		550.00		
			1	108.00	5.50		594.00		
							1144.00	9.01	**10308.00**
	PWD SR 2012-13 Basic Rate	8.60							
	Area Weightage @ 8%	0.69							
	Total	**9.29**							
	Tender Premium -2.99%	**0.28**							
	Grand Total	**9.01**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRRB M500-6: Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH specification NO. 502, **Page No. 172/ Item No. 21.6/ PWD SR 2012-13**	Sqm							
			1	100.00	5.50		550.00		
			1	108.00	5.50		594.00		
							1144.00	38.45	**43988.00**
	PWD SR 2012-13 Basic Rate	36.70							
	Area Weightage @ 8%	2.94							
	Total	**39.64**							
	Tender Premium -2.99%	**1.19**							
	Grand Total	**38.45**							
4	KSRRB M500-18: Providing and laying **semi dense bituminous concrete** 25mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 500.8 complete in all respects as per specifications. **With 80/100 grade bitumen, No. 175/ Item No. 21.20.1/ PWD SR 2012-13**	Cum							
			1	100.00	5.50	0.025	13.75		
			1	108.00	5.50	0.025	14.85		
							28.60	8565.01	**244959.00**
	PWD SR 2012-13 Basic Rate	8175.00							
	Area Weightage @ 8%	654.00							
	Total	**8829.00**							
	Tender Premium -2.99%	**263.99**							
	Grand Total	**8565.01**							
								Total	**968639.00**

(Rupees Nine Lakhs Sixty Eight Thousand Sixty Hundred and Thirty Nine Only)

CERTIFICATE :

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2011-12 and 2012-13+Tender Premium.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Byatarayanapura Division
Yelahanka Zone, B.B.M.P.
Bangalore - 560 092

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Mod. Est. Sanctioned for Rs 968596=00